

## Cardiology

Universitätsspital Basel  
Petersgraben 4, CH-4031 Basel  
Tel. +41 61 265 44 45, Fax +41 61 265 45 98

### Information and patient consent form

## **Electrophysiological examination and catheter ablation of supra-ventricular tachycardias**

Dear patient,

Your doctor has diagnosed you with cardiac arrhythmias with suspected origin in the upper chambers of the heart and referred you to an electrophysiological examination and treatment (radiofrequency ablation). Initially, by performing the electro-physiological examination it will be decided, what kind of cardiac arrhythmias are present and what treatment option could be recommended in your case.

### **Examination and treatment method**

The treatment is performed on fasting patients. After applying local anesthesia to the groin, various catheters are advanced through the veins into the heart under x-ray control. The electrical activity of the heart is measured and through a (pacemaker) stimulation an attempt is made to trigger your own arrhythmia . Only after careful examination it can be decided with certainty whether a radiofrequency ablation is possible and useful.

If it is possible, the structures responsible for the tachycardia are "sclerotized" with radiofrequency energy (a high frequency alternating current) through local tissue heating. The energy is delivered through a catheter with a small metal cap and is usually painless. It is possible that the structures responsible for the tachycardia are located in the upper left ventricle. To reach the left atrium, the septum must be pierced with a thin needle (transseptal puncture). Alternatively, the left atrium may be reached through the femoral artery.

The electrophysiological examination with simultaneous ablation can be time consuming. To ensure that the intervention is not too unpleasant, sleeping aids and sedatives may be administered. During the intervention, the blood is usually diluted. If you suffer from an increased risk of bleeding, please inform your doctor before the examination is started.

### **Potential complications:**

Although these treatments can usually be performed without a problem, complications may occur in a few cases. "Rare" complications are those, which are expected to occur in approximately 1 of a 100 interventions and "very rare" are those which occur approximately once per thousand interventions. Serious complications are described in a total of about 1 % of these interventions. Serious" complications are those, which lead to a prolongation of hospital stay or additional treatment. However, this category also includes the rare complications that can lead to some permanent damage or very rarely even to death.

Risks specifically associated with this therapeutic procedure include:

- As in all procedures, in which a blood vessel has to be punctured, complications such as bruises, vascular lesions, clogged blood vessels (thromboses), blood clots that are carried further (embolism) or very rarely infections may occur in the puncture sites.
- If the cause of the arrhythmia lies in the immediate vicinity of the natural pulse conduction from the atrium to the ventricle (AV node), the natural pulse conduction is then affected in about 1 % of the treated patients. In the vast majority of patients, a spontaneous recovery is noticed. Otherwise, the implantation of a definitive cardiac pacemaker may be necessary, which is very rare.
- A bleeding in the pericardium ( "cardiac tamponade") is very rare. If this results in an impairment of the heart function, the blood has to be removed. An emergency open heart surgery is very rarely required for this.
- Administration of strong pain relieving and sleeping drugs may rarely lead to inadequate breathing. Allergies or hypersensitivity against medications may rarely occur.
- The examination may involve a high exposure to radiation. Therefore, it should not be performed in pregnant women. Long-term damage cannot be excluded, but are usually very rare.

### **After the examination**

After the examination, you must stay in bed to rest according to the doctor's orders. The legs must be kept straight, and the pressure bandage on the groin may not be removed. If swelling occurs on the puncture site, please contact us immediately, especially if this occurs after you are discharged from the hospital. After ablation, a blood thinning medication (usually aspirin) needs to be taken for 4 weeks.

**Space for a sketch / personal notes:**

**Please contact us,**

if you do not understand something or if something seems to be important that was not mentioned in this document or in the personal consultation with your doctor.

**Declaration of consent**

Dr. med. ....

held an informed consent discussion with me. I have understood the information provided to me and could make all the pertinent questions. After sufficient time to think and answering of all my questions I hereby declare myself ready for the proposed therapy. I express my consent for any follow-up procedures that may become necessary.

Signature of patient: \_\_\_\_\_

Signature of doctor: \_\_\_\_\_

Place and date: \_\_\_\_\_

**Consent to data collection and evaluation**

I agree with the collection and analysis of scientific data of my treatment in an encrypted, electronic form. If necessary, the traceability of data for quality assurance is ensured. We assure you with an unrestricted right of access to inspect the data archived about you.

Signature of patient: .....

Place and date: .....